

OMNI-DIRECTIONAL CAMERA DESIGN FOR VIDEO CONFERENCING

ABSTRACT OF THE DISCLOSURE

5 An omni-directional camera array that is very small and unobtrusive and allows for higher pixel resolution for the face of meeting participants sitting or standing around a conference room table, as would be typical in a video conferencing situation. The camera system of the invention uses N cameras and an N sided mirror to capture images of the surrounding scene. The cameras 10 are arranged to have a small distance between their virtual centers of projection. The images from the N cameras are stitched together to create a 360-degree panorama using a calibration surface. To stitch the images together in real-time, a static image stitcher is used, which stitches images together perfectly for objects on a calibration surface. The calibration surface is typically defined by 15 the boundary of the table the camera is sitting on.